

ABSTRACT

A transparent plastic film having a hard-coating layer on one surface, more particularly a plastic film with a hard-coating layer which is used in fabricating a plastic molded article having the hard-coating layer given thereto by the injection molding method and in which no crack is generated after molding, is provided.

A transparent plastic film with a hard-coating layer, wherein, with x (μm) representing a thickness of a plastic base film, and y (%) representing an elongation percentage at the time when the film with the hard-coating layer is pulled under a condition at 22°C with one side fixed and at a pulling speed of 20 mm/min, no crack is generated in the hard-coating layer in a region satisfying a relationship: $y < 5.7$ if $x \leq 100$, $y < -0.018x + 7.5$ if $100 \leq x \leq 150$, $y < -0.008x + 6.0$ if $150 \leq x \leq 200$, $y < -0.005x + 5.4$ if $200 \leq x \leq 300$, $y < -0.003x + 4.8$ if $300 \leq x \leq 400$, $y < -0.002x + 4.4$ if $400 \leq x \leq 500$, and $y < 3.4$ if $500 \leq x$, when a tensile test is carried out under the above-mentioned condition.